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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/266,889	03/12/1999	MICHEL SCHNEIDER	1201-71	6363

7590 08/07/2002

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EXAMINER	
HARTLEY, MICHAEL G	
ART UNIT	PAPER NUMBER
1616	

DATE MAILED: 08/07/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/266,889	Applicant(s) SCHNEIDER ET AL.	
	Examiner Michael G. Hartley	Art Unit 1616	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *13 June 2002* .

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-7,9,14,16,18,19,23 and 27* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-7,9,14,16,18,19,23 and 27* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____ .

3.☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) ☐ The translation of the foreign language provisional application has been received.

15)☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) *11* .
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: .

Continued Examination Under 37 CFR 1.114

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 6/13/2002 has been entered.

Response to Amendment

The amendment filed 6/13/2002 has been entered. New claim 27 has been added.

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

> The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 2 and 9 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

The phrase "an organic compound containing one or more carbon atoms and fluorine" was not described in the specification. The term "Freon" does not describe the genus of "an organic compound containing one or more carbon atoms and fluorine" as "Freon" is directed to a limited number of specific gases, while the scope of said phrase would be much greater than that of Freon. Dependent claim 9 falls therewith.

The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1, 3-7, 14, 16, 18, 19, 23 and 27 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1 contains the trademark/trade name "freon". Where a trademark or trade name is used in a claim as a limitation to identify or describe a particular material or product, the claim does not comply with the requirements of 35 U.S.C. 112, second paragraph. See *Ex parte Simpson*, 218 USPQ 1020 (Bd. App. 1982). The claim scope is uncertain since the trademark or trade name cannot be used properly to identify any particular material or product. A trademark or trade name is used to identify a source of goods, and not the goods themselves. Thus, a trademark or trade name does not identify or describe the goods associated with the trademark or trade name. In the present case, the trademark/trade name is used to identify/describe a gas and, accordingly, the identification/description is indefinite. This is compounded by the fact that the term "Freon" appears to be ever changing, as additional gases are defined by newly assigned numbers, e.g., Freon-11, Freon-12, Freon-114, all by Dupont. Thus, it is unclear of the scope defined by applicant recitation of the tradename Freon in the claims, since the term Freon is used to broadly define a generic group of compounds and has probably changed over the years by the addition of specific freons. The dependent claims fall therewith.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

Claims 1-7, 9, 14, 16, 18, 19, 23 and 27 are rejected under 35 U.S.C. 102(e) as being anticipated by Klaveness '856, Unger '429, Unger '112, Quay '094 and Quay '524, for the reasons set forth in the office action mailed 9/18/2000.

Claims 1-7, 9, 14, 16, 18, 19, 23 and 27 are rejected under 35 U.S.C. 102(e) as being anticipated by Lohrmann '597, for the reasons set forth in the office action mailed 9/18/2000.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1-7, 9, 14, 16, 18, 19, 23 and 27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Klaveness '856, Unger '429, Unger '112, Quay '094 and Quay '524, for the reasons set forth in the office action mailed 9/18/2000.

Claims 1-7, 9, 14, 16, 18, 19, 23 and 27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lohrmann '597, for the reasons set forth in the office action mailed 9/18/2000.

Claims 1-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over any one of Unger (US 5,088,499), Ryan (US 4,900.540) or Ryan (4,544,545) in view of Tickner (US 4,265,251).

Unger discloses ultrasound contrast agents comprising liposomes (e.g., microbubbles) stabilized by a surfactant, i.e., phospholipids at the gas/liquid interface, see abstract and column 9, lines 9+. The microbubbles may encapsulate various gases, e.g., nitrogen, etc., see column 13, line 2.

Ryan '540 discloses ultrasound contrast agents comprising liposomes having a phospholipid surfactant that encapsulates a gas, see abstract. The liposomes encapsulate various gases, see column 2, lines 52+.

Ryan '545 discloses contrast agents comprising liposomes in lamellar form that are made of various phospholipid surfactants, see column 2, lines 40+. The liposomes may encapsulate various materials, including perfluorohydrocarbons (e.g., which would encompass Freons) and other gases for use in ultrasound imaging, see column 3.

Unger, Ryan '540 and '545 fail to disclose the use of a "Freon" gas.

Tickner discloses contrast agent comprising gas microballoons and teaches that "Freon" may be used in an equivalent manner to other known gases, see column 6, line 66.

It would have been obvious to one of ordinary skill in the art to include a Freon in the microballoons disclosed by Unger, Ryan '540 or Ryan '545 because it is known in the art that Freon may be used in an equivalent manner to other known gases for microbubble contrast agents, as shown by Tickner. One of ordinary skill in the art would have been motivated to employ any equivalent gas, such as, Freon, as taught by Tickner in microbubbles to obtain useful contrast agents. Additionally, Ryan '545 teaches that such liposomes may encapsulate perfluorohydrocarbons, which would broadly encompass Freons as disclosed by Tickner.

Double Patenting

Claims 1-7, 9, 14, 16, 18, 19, 23 and 27 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over the claims of U.S. patent Nos. 5,413,774, 5,578,292, 5,686,060, 5,556,610, 5,445,813, 5,518,991, 5,597,549, 5,567,414, 5,711,933, 5,380,519, 5,531,980, 5,271,928, 5,643,553 and 5,658,551, for the reasons set forth in the office action mailed 7/18/2000.

Applicant's request that this rejection be held in abeyance until the claims are otherwise indicated as being allowable is acknowledged.

Claims 1-7, 9, 14, 16, 18, 19, 23 and 27 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over the claims of copending application serial nos. 08/740,653, 08/832,950, 08/637,346, 09/115,963, 08/848,912, 09/021,367, 08/855,055, 08/810,447, 08/910,149, 09/910,152, 08/947,196, 08/893,371, 09/002,710, 09/021,150, 09/225,293, 09/253,536, 09/263,105, 09/401,829, 08/401,835, 08/401,836, 09/401,837 and 09/401,838 for the reasons set forth in the office action mailed 7/18/2000.

Applicant's request that this rejection be held in abeyance until the claims are otherwise indicated as being allowable is acknowledged.

Response to Arguments

Any previous rejections, which are not reiterated herein, have been withdrawn.

Applicant's arguments filed 6/13/2002 have been fully considered but they are not persuasive.

Applicant asserts that, since the claims were copied from the claims of U.S. patents 5,573,751 and 5,409,688 and the present application has an effective filing date earlier than the patent claims, an interference should be declared.

This is not found persuasive because, as set forth in the office action, the effective filing date of the instant application has not been determined to be the date of the earliest filed application, as stated by applicant. Also, the claims do not appear to be substantially copied from the patents. For example, it is noted that patent '751 has a reexamination certificate issued therein and the '688 claims are drawn to free gasbubbles, and do not recite stabilized microbubbles as instantly claimed. Since the claims of the instant application have not been found allowable for the reasons of record, an interference has not been declared.

Applicant argues that the determination of the effective filing date as set forth by the examiner in the office action mailed 9/18/2000 is incorrect.

Applicant asserts that the series of applications describes "Freons" describes the use of the specific gas species' claimed.

This is not found persuasive because the description of a broad genus (e.g., Freon) does not show support for specific species' encompassed therein, given the large number of gas species' encompassed thereby. There is no showing that applicant had possession of these specific gases which are broadly encompassed by the term Freon at the time of the claimed priority, let alone, has possession of these specific gas species with any surfactant given that the priority documents only described the use of certain materials as a stabilizer. The concept of using a surfactant for stabilizing the microbubbles in

combination with the specific gas species' as claimed was not conveyed in the priority documents, but the claimed combination of a surfactant with the specific gas species' as claimed was only described in the instant application, filed March 5, 1999, as set forth in the office action mailed 9/18/2000.

Applicant asserts that Klaveness '856, Unger '429, Unger '112, Quay '094 and Quay '524 and Lohrmann '597are not prior art, since applicant is entitled to benefit of priority, to a date prior to the effective filing dates of these patents.

This is not found persuasive, since the actual effective priority date for the instant invention has been determined as March 5, 1999, as set forth in the office action mailed 9/18/2000 and reiterated herein. Thus, the cited references do qualify as prior art for the instantly claimed invention.

Conclusion

No claims are allowed at this time.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael G. Hartley whose telephone number is (703) 308-4411. The examiner can normally be reached on M-F, 7:30-5, off alternative Mondays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jose G. Dees can be reached on (703) 308-4628. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 308-4556 for regular communications and (703) 308-4556 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-1235.

Michael G. Hartley
Primary Examiner
Art Unit 1616

MH
August 6, 2002